ENCLOSURE 7 P. 7-1

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# 510(K) SUMMARY

DATE

January 10<sup>th</sup>, 2012

PRODUCT, CLASSIFICATION NAME

Trade name: Planmed Verity

Common name: Computed Tomography X-ray System

Classification: JAK, Class II

Regulation number: 21 CFR 892.1750

#### **MANUFACTURER**

Planmed Oy Sorvaajankatu 7 FI-00880 Helsinki, Finland Phone: +358 20 7795 300 Fax: +358 20 7795 396

Contact person: Lars Moring

## UNITED STATES SALES REPRESENTATIVE (U.S. DESIGNATED AGENT)

Planmed USA Inc. 100 North Gary Avenue, Suite A Roselle, IL 60172 Phone: (630) 894 2200

Fax: (630) 894 4271

Contact person: Bob Pienkowski

### INTENDED USE

Planmed Verity is intended to be used for X-ray computed tomography imaging of anatomies within upper and lower extremities.

The use of Planmed Verity X-ray unit is allowed only under supervision of a health care professional.

#### PRODUCT DESCRIPTION

Planmed Verity utilizes the CBCT (Cone Beam Computed Tomography) technology with a flat panel detector to provide high resolution volumetric images. During image acquisition the detector and X-ray tube perform a single rotation around the target of imaging, during which an amount of snapshot X-ray images are acquired. The X-ray radiation is pulsed so that it is active only when data is collected for the projection images. Before reconstruction, calibration corrections are applied to the image data. The reconstruction is then performed using a dedicated reconstruction engine and algorithm.

The system is designed as a compact, stand-alone unit from which the whole imaging procedure from patient information management to image acquisition, processing and archiving can be performed.



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The unit provides a motorized gantry with adjustable height and tilt for the best possible extremity positioning. The construction also enables a weight-bearing option, in which the patient stands inside the gantry during image acquisition. Weight-bearing imaging of the extremity shows the anatomy under natural load.

#### PREDICATE DEVICE

We consider this product to be similar in design, composition and function to the following device introduced into commercial distribution after May 28, 1976:

510(k) # K061834 Xoran xCATTM

## SUBSTANTIAL EQUIVALENCE

The intended use of Planmed Verity and the predicate device is similar. Planmed Verity is intended to be used for imaging anatomies within upper and lower extremities. Intended use of the predicate device covers these same areas and, additionally, other anatomies such as head and neck. Planmed Verity and the predicate device both utilize cone beam computed tomography technology with substantially equivalent technical characteristics for acquiring 3D image data sets of these anatomical areas.

Comparative non-clinical studies were completed to compare the imaging performance of Planmed Verity and the predicate device. The non-clinical comparison included common image quality measures such as high contrast resolution, image noise and Hounsfield Unit (HU) accuracy measured from test objects of relevant size and composition in respect to the anatomies to be imaged with Planmed Verity. A clinical study was also completed to evaluate the image quality of Planmed Verity. The images for this clinical study were selected from patients imaged as part of normal clinical routine in a university hospital in Finland (where appropriate regulatory approvals for the unit are already in effect). Based on the non-clinical and clinical studies the imaging performance of Planmed Verity was found both substantially equivalent to the predicate device and sufficient for clinical use.

#### CONCLUSION

The comparison of characteristics between Planmed Verity and the predicate device demonstrate that Planmed Verity is as safe and effective as the predicate device.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

February 1, 2013

Mr. Lars Moring
Regulatory Affairs Manager
Planmed Oy
Sorvaajankatu 7, FI-00880
HELSINKI
FINLAND

Re: K121418

Trade/Device Name: Planmed Verity Regulation Number: 21 CFR 892.1750

Regulation Name: Computed tomography x-ray system

Regulatory Class: II Product Code: JAK

Dated: December 21, 2012 Received: December 26, 2012

Dear Mr. Moring:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Sean MABoyd -S for

Janine M. Morris
Director, Division of Radiological Health
Office of In Vitro Diagnostics
and Radiological Health
Center for Devices and Radiological Health

Enclosure

# Indications for Use

510(k) Number (if known):	K121418
Device Name:	Planmed Verity
Indications For Use:	
Planmed Verity is intended to be used for X-ray computed tomography imaging of anatomies within upper and lower extremities.  The device is to be operated and used by legally qualified health care professionals.	
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Prescription Use X (Part 21 CFR 801 Subpart D)	AND/OR Over-The-Counter Use (21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)	
Concurrence of CDRH, Office of In Vitro Diagnostics and Radiological Health (OIR)	
Sean M. Boyd -S 2013.02.01 14:52:17 -05'00'	
(Division Sign-Off) Division of Radiological Health Office of In Vitro Diagnostics and Radiological Health	
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